Abstract

Introduction. Dengue is a public health problem. However, the efficacy of typical control programs is not well-established. Objective. The efficacy of social mobilization was assessed for its role in public empowerment in the improvement of dengue control measures. Materials and methods. A community trial was conducted in Comuna Norte, a section of the city of Bucaramanga, Santander. Four high-incidence neighborhoods were selected--two received empowerment training and two served as controls. During 1,968 home visits, information was collected concerning knowledge and practices of dengue control, and information was provided concerning dengue and mosquito larval habitats of the vector. At local schools, dengue control information was provided for 2,455 students. The intervention included training of 155 community leaders and tracking of prevention and control activities. Findings were compared between post-intervention and controls by χ² test, with a significance level of p<0.05. Results. At the home visits, 80.7% of respondents were female, with a mean age of 39.1 and 5.8 years schooling. In comparing the intervention neighborhoods with the controls, differences in knowledge about dengue were as follows: symptoms of bodily pain (χ²=21.0, p<0.001) and abdominal pain (χ²=5.1, p=0.024), reproduction cycle of the mosquito vector (χ²=11.5, p<0.001), knowledge of mosquitoes characteristics (χ²=7.1, p=0.008). In washing practices batteries (χ²=7.2, p=0.007), spraying (χ²=7.0, p<0.008), use of bednets (χ²=49.8, p<0.001), consulting a physician (χ²=8.2, p<0.004), participate in meetings (χ²=29.6, p<0.001), prevention methods (χ²=10.4, p=0.013), willingness to lead anti-mosquito campaigns (χ²=6.8, p=0.009) and to get help for programs (χ²=5.8, p=0.016). There was a decrease in the proportion of households with larvae from 20.0% to 15.9% in both groups. The difference in prevalence of dengue one year after initiation of the program was not significant--4.8% in the intervention group and 6.7% in control (χ²=3.4, p=0.065). Conclusion. The social mobilization was effective for improving actions of empowerment, control, but not dengue prevention.

Keywords

Dengue, prevention and control, evaluation of the efficacy-effectiveness of interventions, health communication, population education, health knowledge, attitudes, practice.